

*USING PARENTS AS THERAPISTS TO EVALUATE APPROPRIATE
BEHAVIOR OF THEIR CHILDREN: APPLICATION TO A
TERTIARY DIAGNOSTIC CLINIC*

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We conducted a preliminary analysis of maintaining variables for children with conduct disorders in an outpatient clinic. Eight children of normal intelligence between the ages of 4 and 9 years were evaluated during 90-min sessions. The children's parents conducted the assessments by varying task demands (easy and difficult) and parental attention (attention and no attention) within a multielement design. The assessment focused on appropriate child behavior and was conducted to formulate hypotheses regarding maintaining contingencies. Results demonstrated that the children's appropriate behavior varied across assessment conditions and, for 7 of the 8 children, occurred at a higher rate during one condition than during other conditions. In addition, treatment integrity data demonstrated that parents were able to implement the procedures as intended. The recommended treatments were rated as being both effective and acceptable to parents for up to 6 months following the evaluation. Our results extend previous studies of functional analytic procedures conducted by trained experimenters with severely handicapped children in more controlled settings.

DESCRIPTORS: direct assessment, conduct-disordered children, parents as therapists

Several authors (e.g., Carr & Durand, 1985; Iwata, Dorsey, Slifer, Bauman, & Richman, 1982; Mace, Page, Ivancic, & O'Brien, 1986; Steege, Wacker, Berg, Cigrand, & Cooper, 1989) have demonstrated that it is possible to identify controlling variables for aberrant behavior through direct assessment. Two general findings have consistently emerged from this literature. First, aberrant behavior of severely handicapped persons has frequently been responsive to specific environmental conditions that can be identified through functional analysis and then controlled through behavioral interventions. Second, the type of environmental conditions identified have been idiosyncratic and apparently not related to a particular diagnostic category. Previous authors have demonstrated, therefore, that functional analyses can provide the necessary bridge between assessment and treatment (e.g., Carr & Durand, 1985; Carr, Newsom, &

Binkoff, 1980; Mace et al., 1986; Slifer, Ivancic, Parrish, Page, & Burgio, 1986).

Although the results of previous studies have been positive, the generality of a functional analytic approach across distinct populations, behaviors, and settings is unknown. To date, most research has focused on self-injurious or aggressive behavior displayed by persons with severe handicaps in inpatient or school settings and has been conducted with professionals well-trained in behavior analysis techniques serving as therapists. The current investigation determined whether the methods of functional analysis can be adapted for suitable use across subjects (children of normal intelligence), settings (outpatient), target behaviors (conduct problems), and therapists (parents).

An outpatient setting was selected because the vast majority of children with behavior problems referred to hospitals are initially evaluated in outpatient clinics rather than in inpatient wards. Unfortunately, because of limitations on patient contact time, outpatient evaluations tend to be diagnostic in approach, and indirect measures (e.g., interviews, behavior rating forms) are frequently used to obtain information about childhood disorders. Although these procedures may provide an

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adequate and efficient means to screen children, apply diagnostic labels, and determine the need for treatment (e.g., Cantwell & Baker, 1987; McMahon, 1987; Shapiro, 1988), they do not always provide the information needed to develop an effective treatment plan. As Kazdin (1987) pointed out, direct measures of child behavior are needed to verify results of indirect measures and to provide additional information about a child's behavior.

Because of the success of functional analytic procedures for prescribing effective treatments in controlled settings, it seemed possible to use a similar approach in an outpatient diagnostic clinic; however, several modifications were needed. The clinic focused on severe behavior problems of children with normal intelligence rather than on children who were severely handicapped. This required a change in tasks and task demands to make the assessment more realistic. Therefore, we selected homework situations, because these activities were reported to be a major cause of conflict at home.

Parents, rather than trained examiners, were selected as the therapists, because most conflicts occurred at home and involved parent-child interactions. With parents in the role of therapist, the assessment focused on increasing the appropriate, rather than the inappropriate, behavior displayed by the child; that is, parents were asked to provide contingent consequences for appropriate behavior. This was considered necessary to facilitate generalized use of the procedures through common stimuli (Stokes & Baer, 1977) between the clinic and home situations.

Finally, only 2 hr were available per patient for the direct assessment, and each patient was seen only once, because the clinic was intended to serve a diagnostic rather than a primary care function. This required making a change in approach to assessment in order to collect data regarding controlling variables, which we attempted to accomplish through a multielement design.

METHOD

Subjects

Eight children between the ages of 4 and 9 years, who were new patients to our behavior manage-

ment clinic and who met the following criteria, were included in the investigation: (a) The child displayed "conduct-type" behaviors as defined by selected criteria from the *Diagnostic and Statistical Manual of Mental Disorders*, third edition, revised (DSM III-R; American Psychiatric Association, 1987); (b) the child's estimated intellectual functioning (based on school records) was within the low average to superior range; (c) the primary referral issue, as reported by the parents, was behavior concerns at home; and (d) the parents rated the problems "severe" as measured by the Revised Behavior Problem Checklist (RBPC; Quay & Peterson, 1983). These ratings ranged from 2 to 4 standard deviations above the mean on the Conduct Disorder Scale ($M = +2.75 SD$). Three of the children were preschoolers; the norms for kindergarten children were used to obtain a severity rating for these children. Eleven children met the criteria for inclusion in the study, but 3 were excluded because of incomplete data.

Setting

The Behavior Management Clinic is a multidisciplinary clinic located in the Department of Pediatrics, The University of Iowa Hospitals and Clinics. It is a tertiary diagnostic clinic with the primary purpose of providing assessments and treatment recommendations for parents and local service providers. In most cases, families travel at least 100 miles to receive clinical services. The current investigation, including all protocols, was incorporated into the standard evaluation conducted by the psychology team. All research procedures were conducted in the regular interview rooms located in the clinic.

Instruments and Tasks

Diagnostic criteria. DSM III-R (APA, 1987) diagnostic criteria were evoked prior to each subject's visit in order to classify him or her as having severe conduct problems. Children were classified as having severe conduct problems based on a rating of "severe" (i.e., a rating of 2) for one or more of the descriptors found on the RBPC and used in the differential diagnosis of conduct or oppositional defiant disorder in the DSM III-R. Descriptors on

both the Conduct Disorder and Socialized Aggression Scales of the RBPC were used.

Criterion tasks. Typical academic tasks involving math or reading problems (or preacademic tasks) were selected for the children based on the difficulty level of the tasks for individual children. Preacademic tasks and items for preschool through Grade 8 were adapted from the Brigance Diagnostic Inventory of Early Development (Brigance, 1978), the Brigance Diagnostic Inventory of Essential Skills (Brigance, 1981), and the Standard Reading Inventory (McCracken, 1966). These tasks were used to create two alternate sets of tasks for both math and reading.

Treatment Acceptability Rating Form. The Treatment Acceptability Rating Form (TARF; Reimers & Wacker, 1988) consists of 15 items evaluating treatment effectiveness, caretaker willingness to carry out the treatment, disruptiveness of the treatment, time to implement treatment, and acceptability of the treatment plan. Each item is rated on a Likert-type scale from 1 to 7 with low scores indicating negative ratings (e.g., 1 = not at all effective). Parents received follow-up rating forms at 1, 3, and 6 months following their initial clinic visit to evaluate treatment acceptability and effectiveness. The TARF was completed by 5 of 8 parents. The remaining 3 parents did not complete the TARF because the primary recommendations for these parents were not specific to behavior management issues with the children (e.g., immediate out-of-home placement).

Target Behaviors and Observation System

Response definitions for child. There were three categories of dependent variables for child behavior: appropriate, inappropriate, and off-task. Appropriate behaviors were defined as on-task behaviors and were identified as reading (silent or oral), speaking in a low voice, following parent directions, making eye contact with a speaker, working on assigned tasks, and asking questions relevant to the task or directions. Inappropriate behaviors were defined as high-intensity or disruptive misbehavior and were identified as swearing, hitting, kicking, throwing objects, displaying temper tantrums, climbing on furniture, attempting to leave the room,

vocalizing loudly, actively refusing to perform a task, and asking questions irrelevant to the task or directions. Off-task behaviors were defined as low intensity misbehavior that included looking away from the task (daydreaming), scribbling, or playing with the pencil. Inappropriate and off-task behaviors were considered as one class of behavior because both received the same consequence (negative attention) from the parents; therefore, for purposes of providing parents with instructions describing how to respond to child behavior and graphing, these were combined and termed "inappropriate."

Procedural integrity of parent behavior. In addition to recording child behavior, the experimenters recorded parent interactions with the child as a measure of procedural integrity. Positive responses (i.e., praise) and negative responses (i.e., reprimands for behavior or corrective feedback to the child regarding a task) were recorded.

Prior to each condition, written instructions were given to the parent with a general statement for the parent to read to the child about the consequences for the child's appropriate behavior and with brief directions for the parent as a reminder regarding the specific consequences to be delivered for the child's appropriate and inappropriate behaviors. When the instructions were given to the parent, a 5-min training session occurred in which the experimenter said, "I am going to pretend to be your child, and you show me how you would respond in this situation." A checklist was used by the examiner to assess the parent's knowledge of where he or she would be sitting during the session, his or her response to appropriate and inappropriate (inappropriate and off-task) child behaviors, and correct and incorrect child responses to tasks. Errors by parents during training were corrected prior to the beginning of each session. Instruction of parents always occurred in a second examination room away from the child, who remained in the testing room. In one case only (Justin), additional training (i.e., a 5-min demonstration of positive parental attention) was provided to the parent prior to the replication assessment. No other instruction or feedback was provided to the remaining parents.

Data collection. One of the experimenters observed parent and child behavior through a one-

way mirror adjoining an interview room that was equipped with a microphone. Data on parental behavior (positive responses and negative responses) were recorded using a 5-s partial interval recording procedure during 10-min sessions. Data on the child's appropriate and inappropriate (including off-task) behaviors were recorded using a 6-s momentary time sampling recording procedure during the same 10-min sessions, so that the child's behavior was recorded after the recording of parental behaviors.

Interobserver agreement. A second experimenter simultaneously but independently collected reliability data for an average of 54% of the assessment sessions across conditions for child behavior (range, 28% to 86% across children) and an average of 45% of the assessment sessions for parent behavior (range, 28% to 100% across parents). Interobserver agreement was calculated on a point-by-point basis (Kazdin, 1982) for occurrence of child and parent behaviors. Agreement was computed by dividing the number of agreements on occurrence by the number of agreements plus disagreements and multiplying by 100. Average agreement was 97% for appropriate child behavior (range, 93% to 100%) and 89% for inappropriate child behavior (range, 74% to 99%). Average agreement was 69% for positive parental attention (range, 54% to 100%) and 74% for negative parental attention (range, 44% to 100%). Nonoccurrences were not scored for reliability purposes. Reliability of parental behavior of less than 50% was always a result of low occurrences of behavior.

Design

Evaluations were conducted in three phases: (a) baseline (no demand), (b) initial assessment, and (c) replication assessment. The experimental design was a multielement design across rapidly changing assessment conditions (initial assessment) followed by a replication phase in which the best and worst initial assessment conditions were repeated. Order of conditions (within the initial assessment phase) and tasks presented within assessment conditions (math and reading) across children were counter-

balanced. One half of the children received math tasks and one half received reading tasks during the initial assessment conditions.

Following the initial assessment, each child and parent participated in a replication assessment, which consisted of repeating the conditions in which the child displayed the highest percentage of appropriate behavior (best condition) and lowest percentage of appropriate behavior (worst condition). Those children who received math tasks in the initial assessment received reading tasks in the replication assessment, and vice versa for children who received reading tasks initially, to ensure that the task demands and/or parent attention, and not the tasks themselves, were controlling child behavior.

To evaluate stability of child responding within a condition, minute-by-minute analyses of child behavior in the best and worst conditions were plotted on separate graphs. These data were used to determine whether child behavior was improving, becoming worse, or staying constant throughout the session and were used to provide further support for the results of assessment. If stable responding occurred, greater control over behavior had been established, whereas if variable responding occurred, less control was established.

Procedure

One to 4 days prior to a child's scheduled visit in the clinic, two members of the Psychology team independently reviewed existing records and a current behavior checklist (RBPC) completed by each child's primary caretaker. The child was diagnosed initially as exhibiting conduct problems based on the DSM III-R and RBPC diagnostic criteria. If both examiners agreed that the parent's primary concern was a severe conduct problem with the child at home, the child was considered eligible for inclusion in the study.

Upon arrival in the clinic, each parent (primary caretaker) received instructions regarding the general procedures for the day and was told that, as part of the assessment, he or she would interact with his or her child while observations were made

through a one-way mirror. Prior to the portions of the initial and replication assessments when the parent and child were to interact, the parent (without the child present) was given the written instructions described above. The instructions for the individual preacademic and academic tasks were printed on a separate sheet.

Baseline. This condition served as a control condition in which no demands were placed on the child and was similar to the free-play condition described by Iwata et al. (1982). The parent was given a written sheet prior to the initiation of the session that said, "Be yourself. Interact with your child as you would at home." Both parent and child were told by the examiner, "I need to do something else right now; I will be back shortly." The parent and child were left alone in the room with access to academic tasks and toys. When the examiner left the room, interactions were recorded through a one-way mirror. No feedback was provided to either the parent or child during or following baseline. Immediately following baseline, the parent was removed from the room, and the child played with a second examiner. Parents were then instructed to complete the following 10-min conditions provided in a counterbalanced order across children.

High demand-parent attention (HDA). During this condition, the parent was instructed to present difficult tasks and to attend to all appropriate behavior. Tasks were chosen at one and two grade levels above current instructional grade level and were defined as being difficult based on either parent and teacher reports or a psychometric evaluation. Written instructions were given to the parent with a general statement for the parent to read to the child about the consequences for the child's appropriate behavior. For example, the statement for the math and reading tasks at preschool through kindergarten levels was, "If you work on this activity, I will help you." The general statement varied slightly depending on the nature of the task. The parent was instructed to sit directly beside the child, to provide the child with verbal and gestural assistance with the task, and to give corrective feed-

back as necessary (e.g., "That's not quite right, I think it goes like this."). The parent also was instructed to give praise when the child was behaving appropriately and completing tasks correctly. Inappropriate behavior was to result in brief redirection back to the task.

High demand-parent ignore (HDI). Tasks were selected and presented as in the HDA condition. Here, however, the parent was instructed to ignore all appropriate behavior. As in the HDA condition, written instructions were given to the parent with the general statement for the parent to read to the child about the consequences for the child's appropriate behavior. For example, the statement for the math and reading tasks at preschool through kindergarten levels was, "If you work on this activity, I will leave you alone." As before, the general statement, varied slightly depending on the nature of the task. The parent was instructed to sit across the table from the child, read a magazine or other materials, and provide no attention (praise or corrective feedback) when the child was working on a task. The parent also was instructed to briefly redirect the child back to the task (e.g., point to the task) when the child was not working.

Low demand-parent attention (LDA). Academic tasks were chosen at one and two grade levels below current instructional or age level based on either parent and teacher reports or an evaluation. Parents were provided with instructions identical to the HDA condition.

Low demand-parent ignore (LDI). Tasks for this condition were selected in the same manner as the LDA condition. Parents were provided with instructions identical to the HDI condition.

Replication assessment. Immediately following the completion of the final initial assessment condition, parents were told that some of the conditions would need to be repeated in order to confirm initial observations. The two replication assessment conditions were then repeated using the same procedures described for the initial assessment, except that different tasks (reading for math or vice versa) were used, and each condition continued for only 5 min.

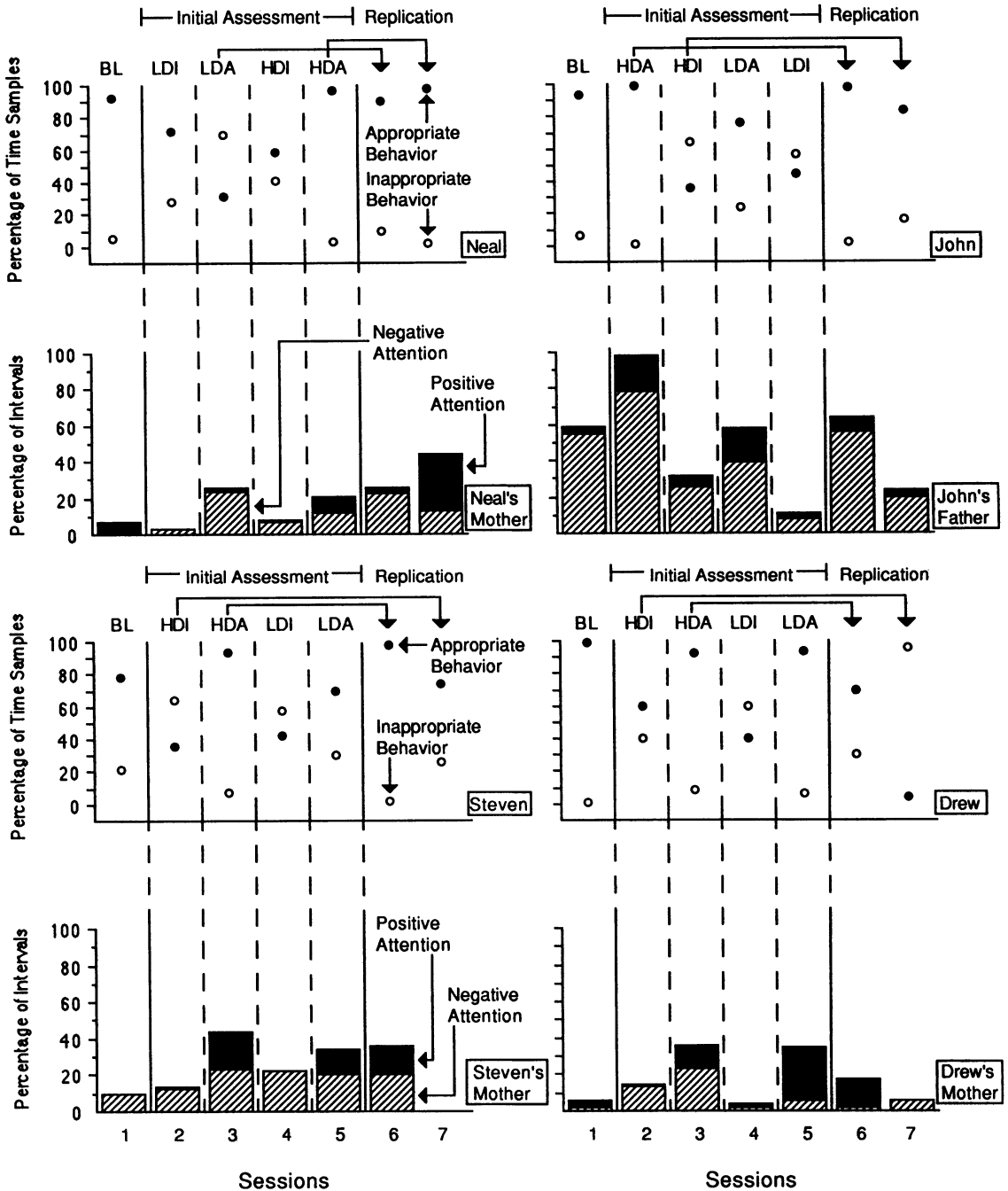


Figure 2. Performance of Neal, John, Steven, Drew, Neal's mother, John's father, Steven's mother, and Drew's mother across all assessment conditions.

RESULTS

Baseline. The performances of the 8 children and their parents are shown in Figures 1 and 2. The children displayed high levels of appropriate

behavior during baseline, with a mean occurrence of appropriate behavior of 87% across intervals (range, 52% to 100%). Baseline consisted mainly of social interactions and opportunities for the parents and children to choose activities (i.e., academic

tasks or toys). Of potential interest was the overall lack of positive parental attention. In most cases, the parent simply ignored the child's appropriate behavior.

Initial assessment. The children's behavior was shown to vary as a function of specific assessment conditions, as demonstrated by changes in behavior across conditions (see Figures 1 and 2). During the initial assessment conditions, 7 of the 8 children displayed a greater percentage of appropriate behavior during one condition than during the other three conditions. Three patterns of appropriate behavior emerged during initial assessment: (a) Appropriate behavior occurred most often with both attention and low task demands (demonstrated by Bob), (b) appropriate behavior occurred most often with both parental attention and high task demands (demonstrated by Cathy, Matt, and Neal), and (c) appropriate behavior occurred most often with parental attention regardless of task demands (demonstrated by John, Steven, and Drew). For 1 child (Justin) no definitive pattern emerged.

Replication assessment. The relationship between the highest and lowest percentage of appropriate behavior was replicated for all children during the 5-min replication assessment conditions. This was important, because it suggested that the specific task presented (math or reading) did not control behavior. Instead, the specific conditions continued to control responding. For example, Cathy performed best in both HDA conditions, and she performed worst in both LDI conditions. Similar results occurred for Matt, with weaker but readily apparent results occurring for Drew, Bob, Steven, John, Neal, and Justin. For the latter 5 children, replication was achieved during the replication assessment; the children again performed best in the best conditions. However, higher levels of appropriate behavior occurred for the worst conditions.

Minute-by-minute analyses. To evaluate consistency of child behavior within initial assessment conditions, a minute-by-minute analysis of behavior was conducted for each child's best and worst conditions obtained during the initial assessment (see Figures 3 and 4). Of interest was whether trends in behavior occurred within these assessment

conditions, indicating that appropriate behavior increased, decreased, or remained stable throughout a condition. Of equal interest was whether different trends occurred for the best and worst conditions.

For 7 of 8 children, the trend for appropriate behavior in the best condition (the highest percentage of appropriate behavior) was stable, with each child displaying a high percentage of appropriate behavior throughout the condition. Justin demonstrated a negative trend in appropriate behavior for his best condition, suggesting that adequate control for his behavior was not established. Justin was also the only child who did not demonstrate a definitive pattern of performance during initial assessment.

Greater variation existed among the trends for the children's worst condition (the lowest percentage of appropriate behavior). During the worst condition, John, Cathy, and Neal showed negative trends; Matt demonstrated a stable but low trend; Drew demonstrated a positive trend; and Steven, Justin, and Bob showed variable trends with no definitive pattern emerging. These results demonstrated that overall, immediate, and positive control over behavior occurred for the best condition. For the worst condition, only Drew demonstrated a positive trend, suggesting that for the remaining children, and especially for those with decreasing trends, low percentages of appropriate behavior would be predicted for even longer sessions.

Procedural integrity. To evaluate procedural integrity, positive and negative parental attention performances are shown in Figures 1 and 2. During baseline, the parents provided positive attention during about 3% of the intervals (range, 0% to 6%) and negative attention during about 19% of the intervals (range, 1% to 58%). Overall, the parents provided more attention (both positive and negative) during the attention conditions than during the ignore conditions. During the attention conditions, the parents provided positive attention on an average of 13% of the intervals (range, 1% to 29%) and negative attention on an average of 33% of the intervals (range, 6% to 78%). In comparison, during the ignore conditions, parents provided attention an average of 1% of the intervals for positive

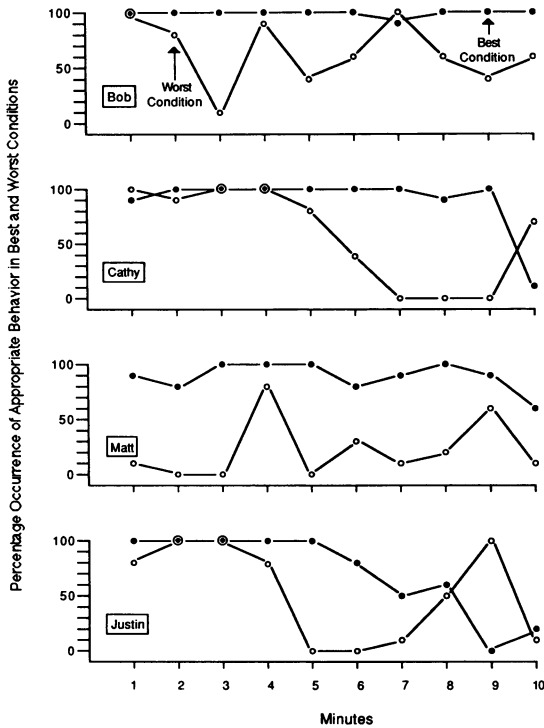


Figure 3. Minute-by-minute analyses of Bob's, Cathy's, Matt's, and Justin's behavior during their best and worst standard assessment conditions.

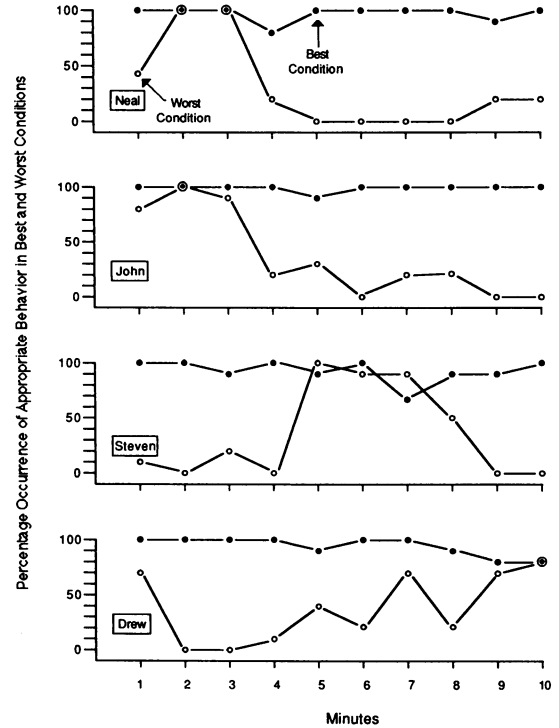


Figure 4. Minute-by-minute analyses of Neal's, John's, Steven's, and Drew's behavior during their best and worst standard assessment conditions.

attention (range, 0% to 6%) and 12% for negative attention (range, 0% to 25%) during the ignore conditions. These results provide support for the procedural integrity of the assessment.

Social validity assessment. The treatment acceptability and effectiveness results for 5 of the parents are presented in Table 1. Overall, immediately following the recommendations, parents rated the proposed treatments as acceptable and indicated that these treatments would most likely be effective. Ratings of treatment acceptability and effectiveness at follow-up (average of 4.8 months, range of 3 to 6 months) continued to remain high.

Parent ratings of their children's behaviors on the RBPC Conduct Disorder Scale are also presented in Table 1. Ratings at follow-up showed overall improvement in the children's behavior over time. The behavior ratings of 3 children decreased by 2 or more standard deviations, and the ratings of 1 child decreased by 1 standard deviation. The ratings of 1 child did not decrease in standard

deviations, although the raw score decreased substantially.

DISCUSSION

The present study demonstrated that a direct assessment can be conducted in an outpatient setting with children of normal intelligence who display conduct problems. When task demands and parental attention were varied within a multielement design, the children's behavior changed. For 7 of 8 children, appropriate behavior occurred at a higher rate during one condition than during other conditions. If a direct assessment had not been conducted, idiosyncratic differences in behavior would not have been identified; that is, the interaction between attention and task demands would have been unknown.

The current assessment, because it was conducted in an outpatient setting, was completed in 1 day. However, even with this severe restriction

Table 1
Parent Ratings of Acceptability (TARF-A), Effectiveness (TARF-E), and Child Behavior (RBPC)

Child	Preassessment ratings			Postassessment ratings		
	TARF-A	TARF-E	RBPC	TARF-A	TARF-E	RBPC
Cathy	7	7	27	7	7	14
Justin	7	6	39	7	7	15**
John	6	5	24	5	4.3	19*
Steven	7	6	30	7	6	16**
Drew	7	7	24	7	7	12**

* Decreased by 1 standard deviation.

** Decreased by 2 or more standard deviations.

in terms of assessment time, the assessment procedures resulted in adequate control over the children's behavior as shown by the changes in their behavior during the initial assessment. In addition, for the 7 children who demonstrated substantial differences across conditions in the initial assessment, all showed the same relative differences in the replication assessment, on a different task, thus suggesting control over behavior.

In the replication assessment, it is of interest that 3 of these 7 children displayed a greater percentage of appropriate behavior in their worst condition than in the same condition during the initial assessment. Thus, whereas the relative effects were replicated, there was an elevation of appropriate behavior in the worst condition. One explanation is provided by the minute-by-minute analyses. Two of these 3 children (Neal and John) demonstrated decreasing trends in appropriate behavior across minutes in their worst condition (displaying appropriate behavior on over 50% of the intervals during the first 5 min but on less than 10% of the intervals during the second 5 min). Future investigators may need to use sessions of at least 10 min, particularly if a trend in behavior is shown.

With regard to treatment recommendations, each parent was provided (following the assessment) with a description of the results that included an explanation of the maintaining variables for the child's best and worst conditions. The acceptability and effectiveness ratings by parents provide indirect support for the validity of assessment; that is, up to 6-month follow-up data indicated that the recommended treatments were effective. It is possible

that these results reflected a bias from the parents who wanted to please the therapists. This appears unlikely, however, because the results were sent to a research office (not to the therapist) and were coded by number, and the therapist in the clinic was not informed of the results. In addition, parents completed a second child behavior checklist at the same intervals as the acceptability surveys; this checklist indicated overall improvement in child behavior. However, the lack of direct observations of differential treatment is a limitation of our study. Future investigators may be well advised to examine the strategies predicated upon our assessment, along with observations of the treatment integrity of the recommendations at scheduled follow-up appointments.

A second limitation of the present investigation that warrants further evaluation is the use of single data points per condition during the analysis. An evaluation of the correspondence between the 90-min outpatient evaluation with an extended evaluation is needed to support the validity of the present design.

One extension of previous research was that parents appeared capable of acting as therapists to facilitate and control their children's appropriate behavior, based on the procedural integrity data. Although positive attention was generally delivered at low rates, positive and negative attention was provided at higher rates during the attention conditions than during the ignore conditions. Of potential clinical importance, parents who serve as the therapists are able to observe directly the assessment results, perhaps increasing the likelihood that (a)

they believe that they can improve their child's behavior by varying task demands and/or amount of attention, and (b) they will implement the recommended treatment procedures at home (e.g., common stimuli; Stokes & Baer, 1977). The follow-up data provide indirect support for this supposition. Future investigators may wish to evaluate the specific effects of positive and negative attention on child behavior.

The assessment of appropriate behavior represents another potentially valuable extension of previous research because parents frequently want to know how to help their child "act better." This may be a different question than asking how to make the child "stop acting that way." Future investigators may wish to conduct direct assessments of both appropriate and inappropriate behavior in order to determine the correspondence of data obtained when contingencies are provided differentially for appropriate and inappropriate behavior. Regardless, the current results suggest that it may be possible to conduct direct assessments of appropriate behavior for children with severe behavior problems.

In considering the usefulness of the assessment procedures, a series of three hierarchically arranged questions must be answered positively: (a) Do the assessment conditions produce changes in behavior? (b) Do these changes in behavior result in differences in treatment selection? (c) Do the treatments selected change behavior in desired ways? Unfortunately, we can offer a positive answer with confidence only to the first question because indirect data were used to answer the other two questions.

We based our assessment approach, even with the limitations imposed by an outpatient clinic, on the functional analytic model proposed by Carr and Durand (1985) and Iwata et al. (1982). Given that we are currently unable to answer definitively the latter two questions listed above, we cannot claim that the assessment procedures comprise a functional analysis. Our intent is to continue to adjust and evaluate the procedures until the assessment data collected in our outpatient setting are comparable to those obtained in more controlled inpatient environments (i.e., until we can positively

answer all three questions needed to claim that a functional analysis was conducted).

Although this may appear to constitute a formidable task, the following statement by Skinner (1953) is relevant: "The commonest objection to thoroughgoing functional analysis is simply that it cannot be carried out, but the only evidence for this is that it has not been carried out" (p. 41). The present results demonstrate that the functional analytic procedures developed by Carr and Durand (1985) and Iwata et al. (1982) may be applicable to a tertiary diagnostic clinic. The continued application and extension of these procedures appear warranted based on our findings.

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